

ABSTRACT OF THE DISCLOSURE

COMPOSITION BASED ON CERIUM OXIDE AND ON ZIRCONIUM  
OXIDE HAVING A HIGH REDUCIBILITY AND HIGH SPECIFIC  
5 SURFACE, METHODS FOR THE PREPARATION  
THEREOF AND USE AS A CATALYST

The inventive composition is based on cerium oxide and  
on zirconium oxide in an atomic proportion Ce/Zr of at  
10 least 1, and has a reducibility rate of at least 70 %  
and a surface area of at least 15 m<sup>2</sup>/g. This  
composition is obtained by a method in which: a mixture  
is made containing cerium and zirconium compounds; this  
mixture is provided with a basic compound whereby  
15 obtaining a precipitate that is heated in an aqueous  
medium; a surfactant-type additive or a polyethylene  
glycol or a carboxylic acid is added to this medium or  
to the separated precipitate; the mixture is ground;  
the precipitate obtained thereof is calcined under  
20 inert gas or vacuum, in a first period of time, at a  
temperature of at least 850 °C and then under an  
oxidizing atmosphere, in a second period of time, at a  
temperature of at least 400 °C.